

### **REMARKS**

Applicants appreciate the thorough examination of the present application as evidenced by the Official Action of December 1, 2006 (hereinafter, "Office Action"). In response, Applicants have amended the pending claims to clarify the recitations thereof in light of the cited art.

In particular, independent Claim 1 has been amended to include the recitations of Claims 2 and 3, and to further recite user interaction based on "voice control". Support for this amendment can be found, for example, at Page 7, line 27 of the present specification as originally filed. Claims 8 and 36 have been canceled to expedite prosecution of the present application, and Claims 9-19 have been amended to depend from Claim 1.

In addition, dependent Claims 2, 3, and 5 have been amended to recite that the control unit is configured to send the extracted part of the displayed data to the speech generating device "a line or a word at a time". Support for this amendment can be found, for example, at Page 7, lines 6-9 of the present specification. Also, new independent Claim 39 has been added to recite a wireless communication device including "a display", "a speaker", "a speech generating device", and "a control unit". Support for this claim can be found, for example, at Page 5, lines 17-19. No new matter has been added.

Accordingly, Applicants submit that pending Claims 1-7, 9-35, 37, and 39 are patentable for at least the reasons discussed below.

### **The Information Disclosure Statement**

The Office Action asserts that Applicants' Information Disclosure Statement (IDS) filed June 16, 2005, failed to provide legible copies of all foreign patent documents and/or non-patent literature publications cited therein. *See* Office Action, Page 2. In particular, document EP 0776097 to Shayovitch et al. and document "FlexVoice DiSP—Text To Speech Distributed Speech Processing" to Smith et al. cited on Applicants' Form PTO-1449A do not appear to have been considered by the Examiner. Although Applicants respectfully maintain that legible copies of these documents were filed with Applicants' IDS of June 16, 2005,

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Applicants have enclosed additional copies of these documents herewith for the Examiner's convenience. Accordingly, Applicants respectfully request consideration of these documents.

### **Applicants' Claim for Priority**

The Office Action acknowledges Applicants' claim for foreign priority based on European Applications 02445177.5 (filed December 16, 2002) and 03011580.2 (filed May 22, 2003), and U.S. Provisional Patent Application 60/474,025 (filed May 29, 2003), but contends that the Applicants have not filed certified copies of these applications as required by 35 USC §119(b). *See* Office Action, Page 2.

In response, Applicants note that copies of these documents were received by the International Bureau of the WIPO with reference to corresponding International Application No. PCT/EP03/12879, as evidenced by the attached Form IB/304. Accordingly, as the present application is a national phase application based on International Application No. PCT/EP03/12879, Applicants respectfully submit that copies of these applications should have been communicated to the USPTO by the International Bureau. However, if for some reason this is not the case, Applicants would be happy to provide certified copies of these applications upon the Examiner's request.

### **Independent Claims 20 and 39 Are Patentable Over Freeland et al.**

Claims 1-37 stand rejected under 35 USC §102(b) as being anticipated by PCT Published International Application Publication No. WO 01/57851 to Freeland et al. (hereinafter "Freeland"). Claim 20, for example, recites:

20. An apparatus, comprising:  
a display configured to display various readable data;  
a control unit; and  
a speech generating device including a conversion circuit therein  
configured to convert received data to a speech signal and configured to be  
connected to a speaker system,  
wherein the control unit is configured to extract at least a part of the  
displayed data and send the extracted part of the displayed data to the speech

generating device. (*Emphasis added*).

Accordingly, Claim 20 recites an apparatus including a control unit that extracts a part of readable data shown on a display and sends the extracted part of the readable data to a speech generating device that converts the readable data into a speech signal. For example, as further described in the present specification:

Text-to-speech conversion is a feature that is of interest in many different areas and applications. One of the more interesting is the use in mobile phones. Today mobile phones are used by almost everyone and a feature like this can be an important aid, especially for the visually impaired and for users who need to focus on other things while using the phone, for instance car drivers using hands-free equipment. The text-to-speech conversion is done in hardware with a text-to-speech circuit. A highlighted menu label, an SMS or other readable data are sent to a microcontroller. The data may be received as ASCII characters and these are forwarded to the text-to-speech circuit by the microcontroller. The text-to-speech circuit converts the characters to audio signals and sends them to a loudspeaker system.

The invention makes the mobile telephone more user-friendly by reading messages and menus to help the user locate himself while browsing the menus system.

Specification, Page 4, line 27 to Page 5, line 3 (*emphasis added*). Thus, in some embodiments of the present invention, the text-to-speech circuit is included in a mobile phone, so that a user of the mobile phone may benefit from the conversion of the displayed readable message into speech.

In contrast, Freeland discloses a system for generating an audio message *over a wide-area communications network*, such as the Internet or a Public-Switched Telephone Network (PSTN). See Freeland, Page 19, lines 4-8. For example, Freeland describes converting a typed message into an audio message at a remote server, and then transmitting the audio message over the communications network to a remote apparatus. More particularly, as illustrated in Figure 1 of Freeland, a user of a computing processing means (for example, personal computer 6) types a message, which is transmitted over the wide-area communications network 4 to a remote server 10 that includes a text to speech conversion unit. The remote server 10 converts the text into an audio message, and then transmits the

audio message over the wide-area communications network 4 to a recipient at a remote computer processing means 8 or a remote telephone terminal 16. The remote server 10 may also transmit the audio message over a mobile network 18 to a remote mobile telephone 20, remote mobile computing processing means 22, and/or remote personal digital assistant 24. See Freeland, Page 19, lines 9-22 and Fig. 1.

Accordingly, nowhere does Freeland disclose or suggest "a display", "a control unit", and "a speech generating device" that converts displayed data into a speech signal in the *same apparatus*. Rather, as noted above, the personal computer 6 that displays the data and the text-to speech conversion unit in the server 10 of Freeland are *remotely* located.

Nevertheless, the Office Action maintains that Freeland discloses the recitations of Claim 20 at Page 19, lines 22-26. See Office Action, Page 6. However, the cited portion of Freeland provides:

Alternatively the sender of the message or greeting may use telephone terminal 26 to deliver their message to the server means 10 which has a speech recognition engine for converting the audio message into a text message which is then converted back into an audio message in the voice of a famous character with or without background effects and with or without prosody.

Freeland, Page 19, lines 22-26. Accordingly, the cited portion of Freeland describes that the remote server 10 converts a received audio message to a text message, and then converts the text message back into an audio message, for example, in the voice of a famous character. However, nowhere does Freeland disclose or suggest that the remote server 10 includes a *display* that displays the text message and a control unit that extracts at least a portion of the *displayed text message* to be converted into the audio message.

Accordingly, Freeland fails to disclose or suggest a single apparatus including "a display", "a control unit", and "a speech generating device", as recited by Claim 20. Thus, Applicants submit that Claim 20 is patentable over Freeland for at least the above reasons. Also, dependent Claims 21-35 and 37 are patentable at least per the patentability of Claim 20 from which they depend. In addition, Claim 39 includes wireless communication device

recitations corresponding to the apparatus of Claim 20, and as such, is patentable for at least similar reasons.

**Independent Claim 1 Is Patentable Over Freeland et al.**

Claim 1 also stands rejected under 35 USC §102(b) as being anticipated by Freeland.

Claim 1 as amended recites:

1. An apparatus, comprising:  
a display configured to display various readable data; and  
a control unit configured to extract at least a part of the displayed data and configured to send the extracted part of the displayed data to a speech generating device that is configured to generate speech from the extracted part of the displayed data,  
wherein the speech generating device is attachable to the apparatus, and wherein the control unit is configured to send the extracted part of the displayed data to the speech generating device at a fixed and/or controllable rate based on user interaction with the display comprising scrolling and/or voice control input received from a user. (*Emphasis added*).

Accordingly, Claim 1 as amended recites an apparatus including a control unit that extracts a part of readable data shown on a display and sends the extracted part of the readable data to an attachable speech generating device at a rate based on user interaction with the display, such as scrolling and/or voice control.

However, nowhere does Freeland disclose or suggest sending displayed data to a speech generating device "at a fixed and/or controllable rate based on user interaction with the display", nor that the user interaction includes "scrolling and/or voice control". For example, in rejecting Claim 2, the Office Action alleges that Freeland discloses sending displayed data at a fixed and/or controllable rate in its description of automatic downloading of jokes, songs, advertisements, etc. at regular intervals. *See* Office Action, Page 3. In particular, the cited portion of Freeland discloses downloading text or audio based jokes, etc. to a user's computer from a remote Web site or Web server including a text to speech conversion unit. *See* Freeland, Page 42, lines 12-16. Freeland further describes that a Webmaster may type the text of the jokes into a WHYSIWYH tool, and the Web server may

convert the text into speech on demand based on a user's request. See Freeland, Page 49, lines 20-24. As such, Freeland discloses converting the text of the jokes, etc. into speech and/or downloading the speech based on a user request; however, Freeland does not disclose or suggest sending the displayed text of the jokes, etc. to the speech generating device in the Web server at a *rate that is based on user interaction with the display* of the user's computer.

Moreover, the Office Action asserts that Freeland discloses sending displayed data based on scrolling in the display in its rejection of Claim 3. See Office Action, Page 3. More particularly, as described in Freeland, scroll bars 354 are provided to scroll through parts of the message to be constructed as part of "a series of drop down menus 350 that will typically be transmitted from a server means 214 through the MMC 212 to a respective mobile terminal 200 in order to allow the user of the mobile terminal 200 to construct a message based on preset expressions 352 included in each of the drop down menus". Freeland, Page 34 lines 13-16 and Figs. 3 and 7. However, while the scroll bars 354 may affect the rate at which the message may be constructed by the user, nowhere does Freeland disclose or suggest that the *rate at which the displayed data is sent to the server 214* is based on the interaction using the scroll bars 354.

Accordingly, Freeland fails to disclose or suggest all of the recitations of Claim 1 as amended. Thus, Applicants respectfully submit that Claim 1 is patentable for at least the above reasons. Also, dependent Claims 2-7 and 9-19 are patentable at least per the patentability of Claim 1 from which they depend.

#### **Many of the Dependent Claims Are Separately Patentable**

As discussed above, Applicants note that the dependent claims are patentable at least per the patentability of independent Claims 1, 8, and 20 from which they depend. Moreover, Applicants submit that various dependent Claims are separately patentable.

For example, Claims 2, 3, and 5 as amended recite sending the extracted part of the displayed data to the speech generating device "a line or a word at a time". However, nowhere does Freeland disclose or suggest sending the message over the wide-area

communications network 4 to the remote server 10 (which includes the text to speech conversion unit) *a line or a word at a time*. Rather, as noted above, Freeland describes that a *entire message* is sent from a user apparatus 6 to the remote server 10. *See* Freeland, Fig. 1. Thus, Applicants submit that Claims 2, 3, and 5 are separately patentable for at least these reasons.

In addition, Claim 6 recites, in part, that "the control unit is configured to send the displayed data responsive to input of definite characters including letters, signs, spaces and/or punctuation marks". The Office Action asserts that Freeland discloses these recitations on Page 37; however, the cited portion of Freeland provides:

Expressions can be added by a What you See is What You Hear (WYSIWYH) tool described in a following section or during regular textual data entry by pressing auxiliary buttons, selecting menu items or by right mouse click menus etc. The expression information is then placed as markups (for example, SABLE or XML) within the text to be sent to the character voice TTS system.

Freeland, Page 37, lines 4-8. Accordingly, nowhere does the cited portion of Freeland disclose or suggest specifically sending displayed data to a speech generating unit responsive to input of letters, signs, spaces, and/or punctuation marks. Thus, Applicants submit that Claim 6 is separately patentable for at least these reasons. Claim 25 includes similar recitations, and is thus separately patentable for at least similar reasons.

Furthermore, Claim 18 recites, in part, that "the speech generating device includes a functional cover comprising a shell covering a front of the apparatus and a microprocessor cooperating with a processor of the apparatus". The Office Action argues that such features are inherent in a mobile terminal. *See* Office Action, Page 6. However, Applicants respectfully submit that nowhere does Freeland disclose a speech generating device including *a functional cover that covers a front of an apparatus* that displays the data. Rather, the speech generating device described in Freeland is included in the server 10, which, as noted above, is *remote* from the apparatus (*i.e.*, personal computer 6) that displays the data to be converted into a speech signal. *See* Freeland, Fig. 1. As such, Applicants respectfully submit

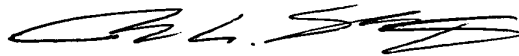
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that the server 10 of Freeland does not include a functional cover/shell that covers the front of the personal computer 6. Thus, Applicants submit that Claim 18 is separately patentable for at least these reasons.

### **Conclusion**

Applicants again appreciate the thorough examination of the present application. However, in light of the amendments and discussion presented above, Applicants submit that all of the pending claims are patentable over the cited references, and that the present application is therefore in condition for allowance, which is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call Applicants' undersigned representative at (919) 854-1400.

Respectfully submitted,

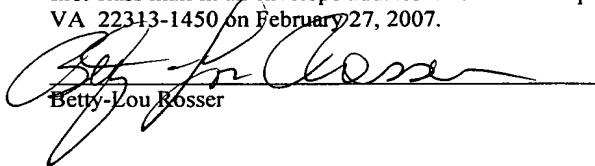


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